

27. (New) A method for inhibiting the polymerization of an amyloid β peptide to a ligand comprising contacting an amyloid β peptide containing environment with a polymerization inhibitory effective amount of a compound according to Claim 1.

28. (New) A method for inhibiting the polymerization of an amyloid β peptide comprising contacting an amyloid β peptide containing environment with a polymerization inhibiting effective amount of a compound according to Claim 1.

29. (New) A method for identifying an organic compound capable of inhibiting the polymerization of amyloid β peptide-ligands or for inhibiting the polymerization of amyloid β peptides based on the ability of such compound to affect the inhibition of polymerization of amyloid β peptide-ligands or the inhibition of polymerization of amyloid β peptides by a compound according to Claim 1.

30. (New) A method of screening a compound library for a compound capable of inhibiting the polymerization of amyloid β peptide-ligands or inhibiting the polymerization of amyloid β peptides based on the ability of such compound to bind to an amyloid β polypeptide in the region of the polypeptide comprising residues 16-20.

31. (New) A method for detecting amyloid deposits by positron emission tomography (PET), comprising detecting said deposit using as the ligand a compound according to Claim 1.

32. (New) A method of inhibiting the polymerization of amyloid β peptide-ligand or amyloid β peptide polymerization in a subject in need of such treatment comprising administering a therapeutic effective amount of a compound according to Claim 1.

33. (New) A method according to Claim 32, which is used to treat Alzheimer's disease or another disease characterized by amyloidoses.

34. (New) The method according to Claim 27 wherein the amino acids of the compound are all D-isomers.

35. (New) A method for treating or preventing demens in patients having
Downs syndrome comprising administering an effective amount of a compound according
to Claim 1.

36. (New) A method for treating or preventing hereditary cerebral hemorrhage associated with amyloidosis (Dutch type) comprising administering an effective amount of a compound according to Claim 1.

37. (New) A method for preventing fibral formation of human amyloid protein in a patient in need of such prevention comprising administering an effective amount of a compound according to Claim 1.